

ABSTRACT

Acrylic based multipolymer compositions having enhanced optical properties, comparable to impact modified PMMA resins, good sub-zero temperature impact strength similar to that of the Acrylic Based Multipolymer Compounds and improved weatherability, are disclosed. These compositions comprise a blend of an acrylic based multipolymer, comprising one or more of acrylonitrile, butyl acrylate, ethyl acrylate, methyl acrylate, methyl methacrylate, and styrene; a methylmethacrylate-butadiene-styrene (MBS) copolymer modifier polymerized by a free radical process; UV stabilizers, including benzotriazole derivatives, triazine derivatives, and hindered amine light stabilizers, as single components or combinations thereof; and one or more antioxidants, dyes and plasticizing flow enhancers. Both the compositions and their method of preparation are disclosed. The compositions are particularly useful for injection molding applications and the preparation of polymer films and sheets having improved optical and thermal properties, that are particularly suited for a variety of industrial applications.